

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-25 (canceled)

1 Claim 26 (new): A telecommunications radio system for mobile
2 communication services comprising a first base station
3 having a plurality of antennas and located at a site, the
4 base station covering an area subdivided into a multitude of
5 sectors by the antennas, wherein:

6 the site comprises a structure with a height of at
7 least 50m from erection ground;

8 the base station is located on the site at a height of
9 at least 50m from erection ground; and

10 at least two of the antennas are arranged in a first
11 ring situated in a first plane orthogonal to and concentric
12 with a longitudinal axis of the site.

1 Claim 27 (new): The telecommunications radio system recited
2 in claim 26 wherein the height of the site is in the range
3 of 90m to 320m from the erection ground and the base station
4 is located on the site at a height in the range of 90m to
5 320m from the erection ground.

1 Claim 28 (new): The telecommunications radio system recited
2 in claim 27 wherein each of said sectors is served by a
3 separate one of the antennas.

1 Claim 29 (new): The telecommunications radio system recited
2 in claim 27 wherein at least one of the antennas is a phase-
3 controlled antenna.

1 Claim 30 (new): The telecommunications radio system recited
2 in claim 29 wherein the multitude of sectors comprises six
3 sectors.

1 Claim 31 (new): The telecommunications radio system recited
2 in claim 29 wherein the multitude of sectors comprises 12
3 sectors.

1 Claim 32 (new): The telecommunications radio system recited
2 in claim 29 wherein the multitude of sectors comprises 24
3 sectors.

1 Claim 33 (new): The telecommunications radio system recited
2 in claim 29 wherein the multitude of sectors comprises 48
3 sectors.

1 Claim 34 (new): The telecommunications radio system recited
2 in claim 26 wherein at least one of the antennas is arranged
3 in a second ring situated in a second plane orthogonal to
4 and concentric with the longitudinal axis of the site, the
5 second ring having a larger diameter than the first ring.

1 Claim 35 (new): The telecommunications radio system recited
2 in claim 34 in which the first plane is the same as the
3 second plane.

1 Claim 36 (new): The telecommunications radio system recited
2 in claim 35 wherein a number of the antennas on the second
3 ring is larger than a number of the antennas on the first
4 ring.

1 Claim 37 (new): The telecommunications radio system recited
2 in claim 36 wherein at least one of the antennas on the
3 second ring has a horizontal angular range that is smaller
4 than a horizontal angular range of the antennas on the first
5 ring.

1 Claim 38 (new): The telecommunications radio system recited
2 in claim 37 wherein at least one of the antennas on the
3 first ring has a vertical aperture angle in the range of 8
4 to 12 degrees.

1 Claim 39 (new): The telecommunications radio system recited
2 in claim 37 wherein the at least one antenna on the second
3 ring has a vertical aperture angle in the range of 3 to 6.5
4 degrees.

1 Claim 40 (new): The telecommunications radio system recited
2 in claim 37 wherein the area is subdivided into 24 sectors
3 by the antennas on the first ring and 72 sectors by the
4 antennas on the second ring.

1 Claim 41 (new): The telecommunications radio system recited
2 in claim 37 wherein shape and/or size of one or more of the
3 sectors can be changed by switching on or off one or more of
4 the antennas.

1 Claim 42 (new): The telecommunications radio system recited
2 in claim 37 wherein the shape and/or size of one or more of
3 the sectors can be changed by changing the horizontal
4 angular range of one or more of the antennas.

1 Claim 43 (new): The telecommunications radio system recited
2 in claim 37 wherein shape and/or size of one or more of the
3 sectors can be changed by changing the vertical aperture
4 angle of one or more of the antennas.

1 Claim 44 (new): The telecommunications radio system recited
2 in claim 37 wherein at least one of the antennas is arranged
3 in a third plane orthogonal to the longitudinal axis of the
4 site so as to cover an area in a proximity zone of the site,
5 the third plane being located below a height of 50m from the
6 erection ground.

1 Claim 45 (new): The telecommunications radio system recited
2 in claim 37 wherein a total number of sectors needed to
3 cover the area is a function of a size of each of said
4 sectors and a required field strength in said each sector.

1 Claim 46 (new): The telecommunications radio system recited
2 in claim 37 in which all of the antennas operate at one
3 frequency.

1 Claim 47 (new): The telecommunications radio system recited
2 in claim 46 wherein a second base station operating at a
3 different frequency, from said one frequency, is situated
4 within the area.

1 Claim 48 (new): A base station for use in a
2 telecommunications radio system, the base station having a
3 plurality of antennas and located at a site, the base
4 station covering an area subdivided into a multitude of
5 sectors by the antennas, wherein:

6 the site comprises a structure with a height of at
7 least 50m from erection ground;

8 the base station is located on the site at a height of
9 at least 50m from erection ground; and

10 at least two of the antennas are arranged in a ring
11 situated in a plane orthogonal to and concentric with a
12 longitudinal axis of the site.

1 Claim 49 (new): An antenna for use in a base station in a
2 telecommunications radio system for mobile communication
3 services, the base station being located at a site, the base
4 station covering an area subdivided into a multitude of
5 sectors with at least one of the sectors being served by the
6 antenna, wherein:

7 the site comprises a structure with a height of at
8 least 50m from erection ground;

9 the base station is located on the site at a height of
10 at least 50m from erection ground; and

11 the antenna and at least one other antenna are arranged
12 in a ring situated in a plane orthogonal to and concentric
13 with a longitudinal axis of the site.

1 Claim 50 (new): A mobile network comprising a
2 telecommunications radio system for mobile communication
3 services, the system having at least one base station, the
4 base station having a plurality of antennas, the base
5 station being located at a site and covering an area

6 subdivided into a multitude of sectors by the antennas,
7 wherein:

8 the site comprises a structure having a height of at
9 least 50m from erection ground;

10 the base station is located on the site at a height of
11 at least 50m from the erection ground; and

12 at least two of the antennas are arranged in a ring
13 situated in a plane orthogonal to and concentric with a
14 longitudinal axis of the site.